WHAT IS CLAIMED IS:

1. A method to provide continuity of service in a radio broadcasting system comprising at least one modem using the COFDM technique, comprising the transmission of N time-frequency cells modulated independently of one another, wherein the method comprises at least the following steps:

at transmission:

a) sending a number N_1 of cells conveying signals needed for the transmission of a digitized audio signal S_1,

b) sending a number N_2 of modulated cells to transmit an analog signal S_2 of analog audio samples,

at reception:

c) when the signals of the N_1 cells cannot be decoded, replacing the digitized audio signal S_1 by the analog signal S_2 conveyed by the cells N_2.

2. A method according to claim 1 comprising, at transmission, one or more pre-processing steps such as lowpass filtering and/or sampling and/or the introduction of a delay for the signal S_2 consisting of analog samples

3. A method according to claim 2, comprising a step for the compression of the dynamic range before the step for the introduction of the delay for the signal S_2.

4. A method according to claim 2, comprising, at reception, a step to separate at least the signal S_1 from the signal S_2 and a step for validating the signal S_1 in decodable or non-decodable form performed before the step c)

5. A method according to claim 2 comprising, at reception, at least one step for post-processing the signal S_2 such as the rejection of background noise.

6. A method according to any of the claims 1 to 5, wherein the proportion of cells N_1 for a passband of about 10 kHz ranges from 50% to 80% of the quantity N of available cells.

7. A radio broadcasting system comprising at least one modem using the COFDM technique, said modem being represented in a time-frequency space by several elementary cells comprising N available cells, at least one

transmitter and at least one receiver, wherein the system comprises at least one of the following elements:

at the transmitter:

- a device adapted to distributing the signals needed for the transmission of a digitized audio signal S_1 in a number N_1 of cells and analog audio signals S_2 in a number N_2 of cells before their transmission,

at the receiver:

- a device for the differentiation, in the received signal Sr, of at least the digitized audio signal S_1 from the signal S_2,
- a device adapted to "qualifying" the signal S_1 in decodable or non-decodable form,
- a device to replace the signal S_1 which is not audible by the analog signal S_2.

8. A system according to claim 7, comprising at least one of the following elements:

- a lowpass filter at the receiver to filter the signal S_2,
- a system for sampling the signal S_2,
- a device designed to introduce a delay,
- a device used to obtain the compression of the dynamic range of the signal S_2.

9. A system according to claim 7 comprising, at the receiver, a device adapted to performing processing operations on the signal S_2 such as the rejection of the background noise.

10. A system according to any of the claims 7 to 9, wherein the number of cells N_1 ranges from 50% to 80% of the value of the number of free cells N in the modem for a frequency band of about 10 KHz.